

Office Action Summary

Application No.

09/823,804

Applicant(s)

NOVAK, ROBERT

Examiner

Brian Jelinek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-61 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/30/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/2001, cont.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Additional IDS's: 1/16/2002, 9/18/2002, 10/2/2003, 6/2/2004

DETAILED ACTION

This is a first office action in response to application no. 09/823,804 filed on 3/30/2001 in which claims 1-61 are presented for examination.

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Specification

The specification is objected to because of the following informalities: the Applicant does not disclose the application number referenced on page 22 of the spec. Appropriate correction is required.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 9-45, 48-49, 50-55, and 57-61 are rejected under 35 U.S.C. 102(b) as

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being anticipated by Driscoll, Jr. et al. (U.S. Pat. No. 6,043,837).

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Regarding claim 1, Driscoll, Jr. et al. teaches capturing an image with a wide angle (360 degree) panoramic camera (Fig. 1, element 405) and panoramic image server (Fig. 4, element 400), the method comprising: placing a scene within a field of vision of a wide angle lens coupled to the camera (Fig. 2a); storing image data of the scene in an image collection array (col. 3, lines 20-25, CCD); digitizing the scene image data into a digitized scene image data and storing the digitized scene image data in memory (col. 3,

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lines 20-32; Fig. 4, element 430); based on a command, selecting a subset of the digitized scene image data (Fig. 5; col. 6, lines 11-18); and performing additional processing on the selected subset of the digitized scene image data (Fig. 4, element 440; col. 6, lines 19-25; col. 5, lines 27-51).

5 Regarding claim 2, Driscoll, Jr. et al. teaches the camera is used to transmit images on a network (Fig. 4, element 490).

 Regarding claim 9, Driscoll, Jr. et al. teaches additional processing comprises: performing distortion compensation on the selected subset of the digitized scene image data (Fig. 5; Fig. 4, element 440; col. 5, lines 27-51).

10 Regarding claim 10, Driscoll, Jr. et al. teaches additional processing comprises: performing compression on the selected subset of the digitized scene image data (col. 4, lines 41-54; Fig. 4, element 460).

 Regarding claim 11, Driscoll, Jr. et al. teaches transmitting the compressed selected subset of the digitized scene image data to a destination device (col. 4, lines 41-15 54; Fig. 4, element 495).

 Regarding claim 12, Driscoll, Jr. et al. teaches the selected subset of the digitized scene image data is based on a pan command (col. 6, lines 11-18).

 Regarding claim 13, Driscoll, Jr. et al. teaches the selected subset of the digitized scene image data is based on a tilt command (col. 6, lines 11-18), because zooming in on 20 a particular offset from the middle of the image is a tilt command.

 Regarding claim 14, Driscoll, Jr. et al. teaches additional processing includes: enlarging the image in the selected subset of the digitized scene image data in response to a zoom command (col. 6, lines 11-18).

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Regarding claim 15, please see the 102 rejection of claim 14.

Regarding claim 16, Driscoll, Jr. et al. teaches the camera is connected to a processor device (Fig. 4, 400).

Regarding claim 17, Driscoll, Jr. et al. teaches selecting the subset is controlled by
5 a processor device (col. 6, lines 11-24; Fig. 4, element 450).

Regarding claim 18, Driscoll, Jr. et al. teaches performing the additional processing is controlled by a processor device (col. 6, lines 11-24; Fig. 4, element 440).

Regarding claim 19, Driscoll, Jr. et al. teaches capturing an image of an object in a camera field of vision (Fig. 1, element 405; Fig. 2a), the method comprising: storing, in
10 an image collection array, data of a scene within the field of vision (col. 3, lines 20-25, CCD); storing, in memory, digitized data of the scene within the field of vision (Fig. 4, element 430; col. 3, lines 20-32); based upon a user command, selecting a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of a camera (col. 6, lines 11-18); and performing additional
15 processing on the subset of the digitized data of the scene (col. 6, lines 19-25; Fig. 4, element 440; col. 5, lines 27-51).

Regarding claim 20, please see the 102 rejection of claim 2.

Regarding claim 21, Driscoll, Jr. et al. teaches the camera is communicatively coupled to a first unit (Fig. 4, element 400) that is capable to transmit images in a
20 network.

Regarding claim 22, Driscoll, Jr. et al. teaches selecting the subset is controlled by a first unit that is capable to transmit images in a network (Fig.4, elements 440 and 460).

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Regarding claim 23, Driscoll, Jr. et al. teaches performing additional processing is controlled by a first unit that is capable to transmit images in a network (Fig. 4, elements 440 and 460).

Regarding claim 24, Driscoll, Jr. et al. teaches the camera is communicatively
5 coupled to a companion unit (Fig. 4, element 440) that is capable of being
communicatively coupled to a first unit (Fig. 4, element 460) for transmitting images in a
network.

Regarding claim 25, the selecting the subset is controlled by a companion unit
(Fig. 4, element 440) that is capable of being communicatively coupled to a first unit
10 (Fig. 4, element 460) for transmitting images in a network.

Regarding claim 26, performing the additional processing is controlled by a
companion unit (Fig. 4, element 440) that is capable of being communicatively coupled
to a first unit (Fig. 4, element 460) for transmitting images in a network.

Regarding claim 27, please see the 102 rejection of claim 16 .

15 Regarding claim 28, please see the 102 rejection of claim 17.

Regarding claim 29, please see the 102 rejection of claim 18.

Regarding claim 30, please see the 102 rejection of claim 12.

Regarding claim 31, please see the 102 rejection of claim 13.

Regarding claim 32, please see the 102 rejection of claim 14.

20 Regarding claim 33, please see the 102 rejection of claim 14.

Regarding claim 34, please see the 102 rejection of claim 9.

Regarding claim 35, please see the 102 rejection of claim 10.

Regarding claim 36, please see the 102 rejection of claim 11.

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Regarding claim 37, please see the 102 rejection of claim 38.

Regarding claim 38, Driscoll, Jr. et al. teaches storing, in an image collection array (col. 3, lines 20-25, CCD), data of a scene within a field of vision of a wide angle lens of a camera (Fig. 4, element 405; Fig. 2a); store, in memory, digitized data of the scene within the field of vision (Fig. 4, element 430; col. 3, lines 20-32); based upon a user command, select a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera (col. 6, lines 11-18); and perform additional processing on the subset of the digitized data of the scene (Fig. 4, element 440; col. 5, lines 27-51). Furthermore, it is clear that the camera and server of Driscoll, Jr. et al. would comprise a machine-readable medium having stored thereon instructions to perform the stated functions because it is inherent that hardware and software require instructions in order to operate.

Regarding claim 39, Driscoll, Jr. et al. teaches capturing an image by use of a camera, the apparatus comprising: means for placing a scene within a field of vision (Fig. 2a) of a wide angle lens coupled to the camera (Fig. 4, element 405); communicatively coupled to the placing means, means for storing image data of the scene in an image collection array (col. 3, lines 20-25, CCD); communicatively coupled to the storing means, means for digitizing the scene image data into a digitized scene image data and for storing the digitized scene image data in memory (Fig. 4, element 430; col. 3, lines 20-32); communicatively coupled to the digitizing and storing means, means for selecting a subset of the digitized scene image data based on a user command where the user can be local or remote to the camera location (remote access is optionally allowed) (col. 6, lines 11-18; Fig. 4, element 440); and communicatively coupled to the selecting means,

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means for performing additional processing on the selected subset of the digitized scene image data (Fig. 4, element 440).

Regarding claim 40, Driscoll, Jr. et al. teaches controlling the capture of an image of an object in a camera field of vision, the apparatus comprising: first means for storing,
5 in an image collection array, data of a scene within the field of vision (col. 3, lines 20-25, CCD); communicatively coupled to the first storing means, second means for storing, in memory, digitized data of the scene within the field of vision (Fig. 4, element 430); communicatively coupled to the second storing means, means for selecting a subset of the digitized data of the scene to simulate an image captured by at least one of panning,
10 tilting and zooming functions of a camera, based upon a user command (col. 6, lines 11-18; Fig. 4, element 440); and communicatively coupled to the selecting means, means for performing additional processing on the subset of the digitized data of the scene (Fig. 4, element 440).

Regarding claim 41, Driscoll, Jr. et al. teaches controlling the capture of an image
15 of an object in a camera field of vision, the apparatus comprising: a camera including a wide angle lens capable to capture a scene within a field of vision of the wide angle lens (Fig. 1, element 405; Fig. 2a); an image collection array communicatively coupled to the wide angle lens and capable to store data of the scene within the field of vision (col. 3, lines 20-25, CCD); a memory communicatively coupled to the image collection array and
20 capable to store digitized data of the scene within the field of vision (Fig. 4, element 430); and a webcam engine (col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images over the World Wide Web) communicatively coupled to a memory and capable to select, based upon a user command, a subset of the digitized data

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of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera (col.6, lines 11-18).

Regarding claim 42, Driscoll, Jr. et al. teaches a compression/correction engine communicatively coupled to the memory and capable to perform compression and distortion compensation on the subset of the digitized data of the scene (Figs. 4, element 440 and 460; col. 4, lines 41-54).

Regarding claim 43, please see the 102 rejection of claim 2.

Regarding claim 44, please see the 102 rejection of claim 53.

Regarding claim 45, please see the 102 rejection of claim 11.

Regarding claim 48, Driscoll, Jr. et al. teaches for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising: a camera (Fig. 4, element 405) including a wide angle lens capable to capture a scene within a field of vision of the wide angle lens (Fig. 2a); an image collection array communicatively coupled to the wide angle lens and capable to store data of the scene within the field of vision (col. 3, lines 20-25, CCD); a processor device (Fig. 4, element 400) including a memory (Fig. 4, element 430) communicatively coupled to the image collection array and capable to store digitized data of the scene within the field of vision, the processor device capable to select a subset of the digitized data (Fig. 4, element 440) of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera (col. 6, lines 11-18).

Regarding claim 49, Driscoll, Jr. et al. teaches the processor device further includes a webcam engine (col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images over the World Wide Web) communicatively coupled to the

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memory and executable by the processor device to select, based upon a user command, the subset of the digitized data of the scene (col. 6, lines 11-18).

Regarding claim 50, Driscoll, Jr. et al. teaches controlling the capture of an image by a camera, the apparatus comprising: a camera having a wide angle lens capable to
5 capture a scene within a wide vision field (Fig. 4, element 405; Fig. 2a); an image collection array communicatively coupled to the wide angle lens and capable to store image data of the entire scene within the wide vision field (col. 3, lines 20-25, CCD); sampling and digitizing stage communicatively coupled to the image collection array and capable to read and digitize the image data stored in the image collection array (col.3,
10 lines 22-25); a memory communicatively coupled to the sampling and digitizing stage and capable to store digitized image data of the entire scene within the wide vision field (Fig. 4, element 430); and a webcam module (col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images over the World Wide Web) communicatively coupled to the memory and capable to select a subset of the stored digitized image data
15 based upon user commands.

Regarding claim 51, please see the 102 rejection of claim 2.

Regarding claim 52, please see the 102 rejection of claim 42.

Regarding claim 53, Driscoll, Jr. et al. teaches the image collection array is capable to store data of an entire scene within the wide vision field (Fig. 6, element 610;
20 (col. 3, lines 21-25).

Regarding claim 54, please see the 102 rejection of claim 11.

Regarding claim 55, Driscoll, Jr. et al. teaches a webcam module (Fig. 4, element 450; col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images

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over the World Wide Web), because the user input processor receives commands across the Internet from a user desiring to control the webcam.

Regarding claim 57, Driscoll, Jr. et al. teaches controlling the image capture by a camera (Fig. 4, element 405), the apparatus comprising: a unit (Fig. 4, element 400) capable of being communicatively coupled to the camera, and capable to store digitized data of a scene within a field of vision of the camera (Fig. 4, element 430); the unit including a webcam engine (Fig. 4, element 450) capable to select, based upon a user command, a subset of the stored digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera (col. 6, lines 11-18); the unit further including a processor (Fig. 4, element 440) communicatively coupled to the webcam engine and capable to execute the webcam engine to permit the selection of the subset of the stored digitized data.

Regarding claim 58, Driscoll, Jr. et al. teaches an image correction module (Fig. 4, element 440) communicatively coupled to the processor and capable to perform distortion compensation on the selected subset.

Regarding claim 59, Driscoll, Jr. et al. teaches controlling the capture of an image of an object, the apparatus comprising: a lens capable to capture a scene within a wide field of vision of the lens (Fig. 1); an image collection array communicatively coupled to the lens and capable to store data of the scene within the wide field of vision (col. 3, lines 20-25); a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the wide field of vision (Fig. 4, element 430); and a processing stage (Fig. 4, elements 440 and 450) communicatively coupled to the memory and capable to select a subset of the digitized data of the scene in response to a

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user command for controlling the capture of the image (col. 5, lines 16-24; col. 6, lines 19-25).

Regarding claim 60, Driscoll, Jr. et al. teaches the processing stage further includes a webcam engine (col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images over the World Wide Web; Fig. 4, element 440) communicatively coupled to the memory and capable to select the subset of the digitized data of the scene.

Regarding claim 61, Driscoll, Jr. et al. teaches the processing stage further includes an image correction engine communicatively coupled to the processor and capable to perform distortion compensation on the selected subset (Fig. 4, element 440).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-8, 41, 46-47, 50 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogasawara (U.S. Pat. No. 6,543, 052) in view of Driscoll, Jr. et al. (U.S. Pat. No. 6,043,837).

Regarding the combination of Ogasawara and Driscoll, Jr. et al., the Examiner notes that Ogasawara broadly teaches a set top box (STB) (Fig. 4, element 10) comprising a tuner and supporting connectivity to a cable provider, Internet

Service Provider, video camera, and a television (Fig. 1). Furthermore, Ogasawara teaches that the video camera connected to the STB may operate as an interphone, thus extending the capabilities of the STB to enable video conferencing(col. 8, line 59-col. 9, lines 13). In addition, Driscoll, Jr. et al.

5 *broadly teaches a wide-angle panoramic camera and server (Fig. 4) capable of transmitting images across a network (Fig. 4, element 490); and specifically teaches the limitations of claimes1, 41, and 50 (please see the corresponding 102 rejections). One skilled in the art would clearly recognize the similarity of these inventions and the synergy that can be realized by enhancing the video camera of*

10 *Ogasawara by providing the teaching of Driscoll, Jr. et al., namely including, a wide angle camera, and associated processing; and the capability to transmit captured images across a network (useful in video conferencing and security applications). In particular one of ordinary skill in the art would have provided the panoramic camera and server of Driscoll, Jr. et al. with the video camera and*

15 *STB of Ogasawara for the purpose of enabling a 360 degree wide angle capture of a scene image, thus ensuring that a caller on an interphone (Ogasawara: col. 8, line 59- col. 9, lines 14) will be in the field of view and be able to be selected for viewing. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the panoramic camera and server*

20 *of Driscoll, Jr. et al. for the video camera and STB of Ogasawara for the purpose of enabling a 360 degree wide angle capture of a scene image, thus ensuring that a caller on an interphone will be in the field of view and able to be selected for viewing.*

Regarding a companion box, it is understood that a companion box is an STB providing enhanced features, such as Internet access and video conferencing and may include a storage device and web browser (Spec. pg. 21, line 23-pg. 22, line 8; WO 02/47383 A1, abstract). As a result, it is clear that the above combination of Ogasawara and Driscoll, Jr. et al. would constitute a companion box, in addition to an STB, because the combined device produces an STB with enhanced features, such as video conferencing, storage, and a web browser (Ogasawara: Figs. 1 and 4; Driscoll, Jr. et al.: Fig. 4). Furthermore, it is clear that the companion box formed by the combination of Ogasawara and Driscoll, Jr. et al. controls an STB because the companion box encompasses the STB and all of its operations.

Regarding claim 3, Ogasawara and Driscoll, Jr. et al. teach a camera is communicatively coupled to a set top box that is capable of transmitting images over data streams in a network (as set forth above).

Regarding claim 4, please see "Regarding the combination" and further note that Driscoll, Jr. et al. teaches selecting a subset of a digitized scene image (Fig. 5; col. 6, lines 11-18).

Regarding claim 5, please see "Regarding the combination" and further note that Driscoll, Jr. et al. teaches performing additional processing (Fig. 4, element 440).

Regarding claim 6, please see the 103 rejection of claim 3 and "Regarding a companion box".

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Regarding claim 7, please see the 103 rejection of claim 4 and “Regarding a companion box”.

Regarding claim 8, please see the 103 rejection of claim 5 and “Regarding a companion box”.

- 5 Regarding claim 46, please see “Regarding the combination” and further note that Driscoll, Jr. et al. teaches a webcam engine (col. 4, line 58-col. 5, line 6; webcam: a camera used in transmitting live images over the World Wide Web).

Regarding claim 47, please see the 103 rejection of claim 46 and “Regarding a companion box”.

- 10 Regarding claim 56, please see the 103 rejection of claim 47.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (703) 305-4724.

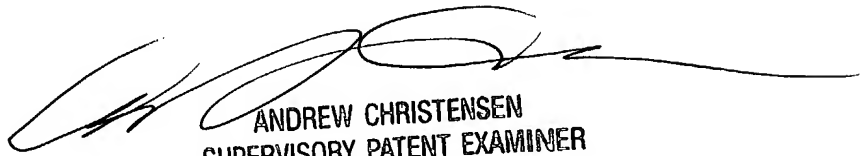
- 15 The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10 Brian Jelinek
9/15/2004



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